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10/016,882	12/14/2001	Mark E. Day	5759B-000004/US	7738
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HARNESS, DICKEY, & PIERCE, P.L.C			ERB, NATHAN	
7700 BONHOMME, STE 400			ART UNIT	
ST. LOUIS, MO 63105			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/016,882

Applicant(s)

DAY, MARK E.

Examiner

Nathan Erb

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 16-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20071010.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Applicant's response to Office action was received on October 10, 2007.
3. In response to applicant's amendment of the claims, all of the claim objections from the previous Office action are hereby withdrawn.
4. In response to applicant's amendment of the claims, all of the rejections of the claims under 35 U.S.C. 112, second paragraph, from the previous Office action are hereby withdrawn.
5. In response to applicant's amendment of the claims, the corresponding prior art rejections below in this Office action have been correspondingly amended.
6. Examiner believes that the revised prior art rejections below in this Office action render applicant's arguments against the previous prior art rejections to be no longer applicable.

### ***Claim Rejections - 35 USC § 102***

7. Claim 38 is rejected under 35 U.S.C. 102(b) as being anticipated by Peddie et al., U.S. Patent No. 4,351,028.

As per **Claim 38**, Peddie et al. discloses:

- a method for communicating information relating to a utility service between a utility host, a customer interface, and a control assembly for said utility service (column 1, lines 10-20; column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 4, lines 22-46);

- determining an amount of prepaid service remaining in a customer account (column 1, lines 10-20; column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 4, lines 22-46);

- communicating the determined amount of prepaid service remaining in the customer account from the utility host to the customer interface for display to the customer (column 1, lines 10-20; column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 4, lines 22-46);

- communicating a disconnect command from the utility host to the control assembly when the amount of prepaid service in the customer account is exhausted (column 1, lines 10-20; column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 4, lines 22-46).

***Claim Rejections - 35 USC § 103***

8. Claims 1-5, 7-11, 16-20, 22-31, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peddie et al. in view of Frew et al., U.S. Patent No. 4,803,632.

As per **Claims 1 and 16**, Peddie et al. discloses:

- a method (or a communications system) for customers to communicate with and pay a utility for at least one utility service (column 1, lines 23-44; column 1, line 61, through column 2, line 64);

- establishing (or a utility host programmed to store) a customer account with (or for) said customer, said customer account including a billing method and a payment method (column 1, lines 23-44; column 1, line 61, through column 2, line 64; utility host would be the remote

central processor; billing method here could be prepayment billing; payment method here could be credit card charging);

- providing a communication system comprising a utility host, a customer interface, and a control assembly programmed to control said utility service and communication between said utility host and said customer interface (column 1, lines 23-44; column 1, line 61, through column 2, line 64; utility host would be the remote central processor; customer interface here includes the display and keyboard on the customer side of the system; control assembly here would be the data processor on the client side of the communication system);

- communicating (or a customer interface to communicate) payment information to and from said customer using said communication system to complete payment of at least a portion of a customer balance on said customer account in accordance with said billing method and said payment method (column 1, lines 23-44; column 1, line 61, through column 2, line 64; customer interface here includes the display and keyboard on the customer side of the system; billing method here could be prepayment billing; payment method here could be credit card charging).

Peddie et al. fails to disclose said communication system having no dedicated wiring between said customer interface and said control assembly. Frew et al. discloses said communication system having no dedicated wiring between said customer interface and said control assembly (column 2, lines 45-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. such that said communication system has no dedicated wiring between said customer interface and said control assembly, as disclosed by Frew et al. Motivation is provided by Frew et al. in that such a configuration can make installation of the system easier (column 2, lines 45-58).

As per **Claims 2 and 17**, Peddie et al. further discloses communicating (or wherein said communication system is programmed to communicate) customer account and utility service information to and from said customer using said communication system (column 1, lines 23-44; column 1, line 61, through column 2, line 64; here, customer account and utility service information is billing capability).

As per **Claims 3 and 18**, Peddie et al. further discloses wherein said customer account and utility service information comprises billing capability (column 1, lines 23-44; column 1, line 61, through column 2, line 64).

As per **Claims 4 and 19**, Peddie et al. further discloses wherein said customer account and utility service information is provided as customized or pre-defined messages to particular customer accounts (column 1, lines 23-44; column 1, lines 45-60; column 1, line 61, through column 2, line 64).

As per **Claims 5 and 20**, Peddie et al. further discloses disconnecting and/or reconnecting (or wherein said control assembly is programmed to disconnect and/or reconnect) said utility service using said communication system based upon a comparison of said customer account with said payment information (column 1, lines 23-44; column 1, line 61, through column 2, line 64).

As per **Claims 7 and 22**, Peddie et al. further discloses providing (or wherein said communication system is programmed to provide) customer account usage information for said utility service using said communication system (column 1, lines 23-44; column 1, line 61, through column 2, line 64).

As per **Claims 8 and 23**, Peddie et al. further discloses wherein said customer account usage information comprises amount remaining (column 1, lines 23-44).

As per **Claims 9 and 24**, Peddie et al. further discloses wherein said billing method comprises prepayment billing (column 1, lines 23-44).

As per **Claims 10 and 25**, Peddie et al. further discloses wherein said payment method comprises credit card charging (column 1, line 61, through column 2, line 64).

As per **Claims 11 and 26**, Peddie et al. further discloses wherein said debt management includes a postpayment mode and a prepayment mode (column 1, lines 10-20; column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 4, lines 22-46).

As per **Claim 27**, Peddie et al. fails to disclose wherein said customer interface is in power line communication with said control assembly. Frew et al. further discloses wherein said customer interface is in power line communication with said control assembly (column 2, lines 45-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's

invention to modify the invention of Peddie et al. as modified in the rejection for claim 16 such that said customer interface is in power line communication with said control assembly, as disclosed by Frew et al. Motivation is provided by Frew et al. in that such a configuration can make installation of the system easier (column 2, lines 45-58).

As per **Claim 28**, Peddie et al. further discloses wherein said billing method includes at least one rate schedule (column 1, lines 45-60; column 3, line 35, through column 4, line 7).

As per **Claim 29**, Peddie et al. further discloses wherein said payment information is communicated in accordance with a payment cycle (column 1, lines 23-44; column 1, line 61, through column 2, line 64).

As per **Claim 30**, Peddie et al. further discloses wherein said payment cycle supports one or more parameters including a disconnect point (column 1, lines 23-44; column 1, line 61, through column 2, line 64).

As per **Claim 31**, Peddie et al. further discloses wherein said utility host comprises a computer performing tasks (column 1, lines 23-44; column 1, line 61, through column 2, line 64). Peddie et al. fails to disclose wherein a computer performs tasks by running application software. However, that element/limitation was well-known to one of ordinary skill in the art at the time of applicant's invention. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. as modified in the



rejection for claim 16 such that a computer performs tasks by running application software, as was well-known to one of ordinary skill in the art at the time of applicant's invention.

Motivation is provided in that it was well known to one of ordinary skill in the art at the time of applicant's invention that application software is an effective method of instructing a computer what to do.

As per **Claim 33**, Peddie et al. further discloses wherein said control assembly comprises a power switch, control electronics programmed to complete usage calculations and external communications, and a transceiver for communicating with said utility host (Figure 1; column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 3, lines 8-34).

As per **Claim 34**, Peddie et al. further discloses:

- a communication system for customers to remotely communicate with and pay a utility for at least one utility service (column 1, lines 23-44; column 1, line 61, through column 2, line 64);

- a customer control system at a location remote from said utility, said customer interface being programmed to communicate payment information to and from said customer to complete payment of at least a portion of a customer balance on a customer account in accordance with a billing method and a payment method stored at said utility; and a control assembly to control said utility service to said customer (column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 4, lines 22-46; billing method here could be prepayment billing; payment method here could be credit card charging; billing method

must be stored at the utility because this would be required for the central processor at the utility to determine when payment is sufficiently past-due to justify disconnecting power to the customer; payment method must be stored at the utility for the utility to be able to determine whether or not a credit transfer should be allowed by the data processing means).

Peddie et al. fails to disclose said communication system having no dedicated wiring between said customer interface and said control assembly. Frew et al. discloses said communication system having no dedicated wiring between said customer interface and said control assembly (column 2, lines 45-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. such that said communication system has no dedicated wiring between said customer interface and said control assembly, as disclosed by Frew et al. Motivation is provided by Frew et al. in that such a configuration can make installation of the system easier (column 2, lines 45-58).

As per **Claim 35**, Peddie et al. discloses:

- a communication system for a prepaid utility service (column 1, lines 10-20; column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 4, lines 22-46);
- the system comprising a utility host for managing a customer account, a customer interface for displaying information regarding the customer account, and a control assembly for controlling the utility service, the utility host configured for communicating with the customer interface and with the control assembly (column 1, lines 10-20; column 1, lines 23-44; column 1,

line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 4, lines 22-46).

Peddie et al. fails to disclose the communication system having no dedicated wiring between the customer interface and the control assembly. Frew et al. discloses the communication system having no dedicated wiring between the customer interface and the control assembly (column 2, lines 45-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. such that the communication system has no dedicated wiring between the customer interface and the control assembly, as disclosed by Frew et al. Motivation is provided by Frew et al. in that such a configuration can make installation of the system easier (column 2, lines 45-58).

As per **Claim 36**, Peddie et al. further discloses wherein the customer interface is configured for communicating with the control assembly (column 1, lines 10-20; column 1, lines 23-44; column 1, line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 4, lines 22-46).

As per **Claim 37**, Peddie et al. fails to disclose wherein the customer interface is configured for communicating with the control assembly via a power line carrier. Frew et al. further discloses wherein the customer interface is configured for communicating with the control assembly via a power line carrier (column 2, lines 45-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. as modified in the rejection for claim 36 such that the customer interface is

configured for communicating with the control assembly via a power line carrier, as disclosed by Frew et al. Motivation is provided by Frew et al. in that such a configuration can make installation of the system easier (column 2, lines 45-58).

9. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peddie et al. in view of Frew et al. in further view of Thornborough et al., U.S. Patent No. 4,817,131.

As per **Claims 6 and 21**, Peddie et al. and Frew et al. fail to disclose managing (or wherein said communication system is programmed to manage) the transfer of said utility service to a new customer or between customers using said communication system.

Thornborough et al. discloses managing (or wherein said communication system is programmed to manage) the transfer of said utility service to a new customer or between customers using said communication system (column 1, lines 4-20; column 3, lines 7-31; column 3, line 66, through column 4, line 16; column 4, lines 49-55; column 6, lines 35-53; column 9, lines 41-52; column 32, lines 1-14). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. as modified in the rejection for claim 1 such that it manages (or said communication system is programmed to manage) the transfer of said utility service to a new customer or between customers using said communication system, as disclosed by Thornborough et al. Motivation is provided by Thornborough et al. in that sometimes a new customer moves into a location and will be using the same meter as the previous customer at that location (column 4, lines 49-55; column 6, lines 35-53; column 9, lines 41-52; column 32, lines 1-14).

10. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peddie et al. in view of Frew et al., U.S. Patent No. 4,803,632, in further view of Hogan, U.S. Patent No. 5,699,528, in further view of McGregor et al., U.S. Patent No. 5,577,100.

As per **Claim 32**, Peddie et al. further discloses wherein said customer interface comprises a display and a numeric keypad (Figure 1; column 1, line 61, through column 2, line 64; column 3, line 35, through column 4, line 7; column 3, line 35, through column 4, line 7).

Peddie et al. fails to disclose wherein a display is an LCD display. Frew et al. further discloses wherein a display is an LCD display (column 4, lines 7-19; column 8, lines 14-36; column 10, lines 30-42; column 10, line 53, through column 11, line 4; column 11, lines 20-40; column 13, line 18, through column 14, line 2). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. as modified in the rejection for claim 16 such that a display is an LCD display, as disclosed by Frew et al. Motivation is provided by Frew et al. in that an LCD display can be effectively used to communicate utility information to a customer (column 4, lines 7-19; column 8, lines 14-36; column 10, lines 30-42; column 10, line 53, through column 11, line 4; column 11, lines 20-40; column 13, line 18, through column 14, line 2).

Peddie et al. and Frew et al. fail to disclose navigation push-buttons. Hogan discloses navigation push-buttons (column 10, line 65, through column 11, line 9). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. as modified in the rejection for claim 16 and as modified above in this rejection such that it includes navigation push-buttons, as disclosed by Hogan. Motivation is

provided by Hogan in that navigation push-buttons can be used to move between various selections on a display (column 10, line 65, through column 11, line 9).

Peddie et al., Frew et al., and Hogan fail to disclose multi-colored LED's. McGregor et al. discloses multi-colored LED's (column 5, lines 40-55). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Peddie et al. as modified in the rejection for claim 16 and as modified above in this rejection such that it includes multi-colored LED's, as disclosed by McGregor et al. Motivation is provided by McGregor et al. in that different colors of LEDs may be used to communicate various different indications (column 5, lines 40-55).

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. **Examiner's Note:** Examiner has cited particular portions of the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Erb whose telephone number is (571) 272-7606. The examiner can normally be reached on Mondays through Fridays, 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571) 272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

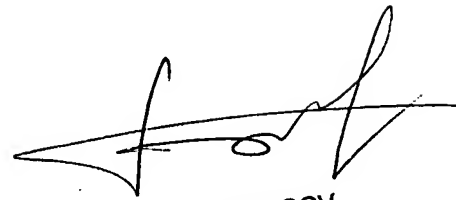
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Examiner  
Art Unit 3628

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